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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,868	10/26/2000	Akira Higeta	684.3101	3187

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EXAMINER	
GRAINGER, QUANA MASHELL	
ART UNIT	**PAPER NUMBER**
2852	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/695,868	HIGETA ET AL.	
	Examiner	Art Unit	
	Quana Grainger	2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 1-30-04

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-27 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-27 recites an elastic member that is spaced from and end seal but also recites that the entire length of the elastic member contacts the end seal. It's unclear how the elastic member can be spaced from and contacting the end seal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara et al. in view of Nagashima.

Uehara et al. teaches a process cartridge having a developing roller; a developing blade and an elastic member at a position spaced from a toner accommodating portion to a longitudinally inside portion of an end seal provided adjacent each of opposite longitudinal ends of the developing roller. Uehara et al. does not discuss the claimed method of remanufacturing.

Nagashima teaches a remanufacturing method of remanufacturing a process cartridge comprising: (a) a step of preparing a used process cartridge which comprises a toner developing container, a cleaning container and pins for coupling the toner developing container and the cleaning container at opposite longitudinal ends of the process cartridge; the toner developing container including a toner accommodating portion, a toner supply opening, a developing roller and a developing blade; the cleaning container including an electrophotographic photosensitive drum; (b) a container separating step of separating the process cartridge into the toner developing container and the cleaning container by disengaging the pins from the process cartridge; (c) a developing roller dismounting step of dismounting the developing roller from the toner developing container separated by said container separating step; (d) a developing blade dismounting step of dismounting the developing blade from the toner developing container separated by said container separating step; (e) an elastic member mounting step of mounting an elastic member; (f) a developing blade mounting step of mounting the developing blade dismounted in said developing blade dismounting step or another developing blade on the toner developing container separated in said container separating step or another toner developing container; (g) a developing roller mounting step of mounting the developing roller dismounted in developing roller dismounting step or another developing roller on the toner developing container having the developing blade mounted in said developing blade mounting step and

separated in said container separating step or the another toner developing container having the developing blade mounted in said developing blade mounting step; (h) a toner refilling step of refilling the toner into the toner accommodating portion of the toner developing container having the developing blade mounted in said developing blade mounting step and the developing roller mounted in said developing roller mounting step and being separated in said container separating step or a toner accommodating portion of the another toner developing container having the developing blade mounted in said developing blade mounting step and the developing roller mounted in said developing roller mounting step; and (i) a container coupling step of coupling the toner developing container having the developing blade mounted in said developing blade mounting step and the developing roller mounted in said developing roller mounting step and being separated in said container separating step or the another toner developing container having the developing blade mounted in said developing blade mounting step and the developing roller mounted in said developing roller mounting step with the cleaning container separated in said container separating step or another cleaning container by engaging the pins disengaged in said container separating step or other pills into them (column 9, line 9- column 10, line 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teaching of Nagashima with the process cartridge of Uehara et al. to obtain a remanufacturing process in which the sealing member is easily mountable (column 1, lines 37-49)

Uehara et al. in view of Nagashima also further suggests a flexible sheet mounting step of mounting after said elastic member mounting step and, before said toner refilling step, a flexible sheet to the toner developing container separated in said container separating step or the another

toner developing container so as to extend along the longitudinal direction of the developing roller when the developing roller is mounted to the toner developing container separated in said container separating step or the another toner developing container (column 10, lines 23-51). In said flexible sheet mounting step, each of longitudinal ends of the flexible sheet extends over a surface of the elastic member and a part of the end seal. The method further comprising a first and second side seal mounting step of mounting, after said flexible sheet mounting step, a first side seal continuously on a longitudinal end of the flexible sheet mounted on the toner developing container separated in said container separating step or the another toner developing container and on the toner developing container separated in said container separating step or the another toner developing container, and a second side seal continuously on the other longitudinal end of the flexible sheet mounted on the toner developing container separated in said container separating step or the another toner developing container and on the toner developing container separated in said container separating step or the another toner developing container (column 10, line 15-column 12, line 44).

Uehara et al. in view of Nagashima suggests a remanufacturing method of remanufacturing a process cartridge comprising: (a) a step of preparing a used process cartridge which comprises a toner developing container, a cleaning container and pins for coupling the toner developing container and the cleaning container at opposite longitudinal ends of the process cartridge; the toner developing container including a toner accommodating portion, a toner supply opening, a developing roller and a developing blade; the cleaning container including an electrophotographic photosensitive drum; (b) a container separating step of separating the process cartridge into the toner developing container and the cleaning container by

disengaging the pins from the process cartridge; (c) a developing roller dismounting step of dismounting the developing roller from the toner developing container separated by said container separating step; (d) a developing blade dismounting step of dismounting the developing blade from the toner developing container separated by said container separating step; (e) an elastic member mounting step of mounting an elastic member at a position spaced from the toner accommodating portion to a longitudinally inside portion of an end seal provided adjacent each of opposite longitudinal ends of the developing roller dismounted in said developing roller dismounting step or another developing roller; (f) a flexible sheet mounting step of mounting a flexible sheet to the toner developing container separated in said container separating step or another toner developing container so as to extend along the longitudinal direction of the developing roller on which the elastic member is mounted in said elastic member mounting step when the developing roller on which the elastic member is mounted in said elastic member mounting step is mounted to the toner developing container separated in said container separating step to which the flexible sheet is mounted in said flexible sheet mounting step or to the another toner developing container to which the flexible sheet is mounted in said flexible sheet mounting step; (g) a first and second side seal mounting step of mounting a first side seal continuously on a longitudinal end of the flexible sheet mounted on the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and separated in said container separating step or the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step and on the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and being separated in said container separating step or the another toner developing container having the flexible sheet mounted in

said flexible sheet mounting step, and mounting a second side seal continuously on the other longitudinal end of the flexible sheet mounted on the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and separated in said container separating step or the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step and on the toner developing container having flexible sheet mounted in said flexible sheet mounting step and separated in said container separating step or the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step; (h) a developing blade mounting step of mounting the developing blade dismounted in said developing blade dismounting step or another developing blade oil the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and separated. said container separating step or the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step; (1) a developing roller mounting step of mounting the developing roller dismounted in said developing roller dismounting step or another developing roller on the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and separated in said container separating step or the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step; (j) a toner refilling step of refilling the toner into the toner accommodating portion of the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and separated in said container separating step or a toner accommodating portion of the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step; and (k) a container coupling step of coupling the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and separated in said container

separating step or the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step with the cleaning container separated in said container separating step or another cleaning container by engaging the pins disengaged in said container separating step or other pins into them.

The elastic member is mounted on a side of the end seal. The end seal is made of a plastically deformable material. The toner refilling step is carried out through a toner filling opening after said elastic member mounting step, said developing blade mounting step, and said developing roller mounting step. The developing blade mounting step, a new developing blade or a used developing blade is mounted. In said developing roller mounting step, a new or used developing roller is mounted. The cleaning container includes a cleaning blade mounted thereon and accommodates developer removed from the electrophotographic photosensitive member, and wherein prior to said container coupling step, the electrophotographic photosensitive drum and a the cleaning blade are dismounted from the cleaning container, and toner which has been removed from the electrophotographic photosensitive drum and accommodated in the cleaning container, is removed.

Uehara et al. in view of Nagashima suggests a method wherein after the toner is removed; a new or used electrophotographic photosensitive drum and a new or used cleaning blade are mounted. The toner supply opening supplies the toner accommodated in the toner accommodating portion to the developing roller, wherein said remanufacturing method is implemented by pulling out a toner seal, for sealing the toner supply opening provided to supply the toner accommodated in the toner accommodating portion to the developing roller, to supply toner accommodated in the toner accommodating portion to the developing roller.

Uehara et al. in view of Nagashima suggests a remanufacturing method of remanufacturing a process cartridge comprising: (a) a step of preparing a used process cartridge which comprises a toner developing container, a cleaning container and pins for coupling the toner developing container and the cleaning container at opposite longitudinal ends of the process cartridge; the toner developing container including a toner accommodating portion, a toner supply opening, a developing roller, and a developing blade; the cleaning container including an electrophotographic photosensitive drum; (b) a container separating step of separating the process cartridge into the toner developing container and the cleaning container by disengaging the pins from the process cartridge; (c) a developing roller dismounting, step of dismounting the developing roller from the toner developing container separated by said container separating step; (d) a developing blade dismounting step of dismounting the developing blade from the toner developing container
separated by said container separating step; (e) an elastic member mounting step of mounting an elastic member at a position spaced from the toner accommodating portion to a longitudinally inside portion of an end seal provided adjacent each of opposite longitudinal ends of the developing roller dismounted in said developing roller dismounting step or another developing roller; (f) a flexible sheet mounting step of mounting a flexible sheet to the toner developing container separated in said container separating step or another toner developing container so as to extend along the longitudinal direction of the developing roller on which the elastic member is mounted in said elastic member mounting step when the developing roller on which the elastic member is mounted in said elastic member mounting step is mounted to the toner developing container to which the flexible sheet is mounted in said flexible sheet mounting step and which

was separated in said container separating step or to the another toner developing container to which the flexible sheet is mounted in said flexible sheet mounting step; (g) a first and second side seal mounting step of mounting a first side seal continuously on a longitudinal end of the flexible sheet mounted on the toner developing container having the flexible sheet and separated in said container separating step or mounted on the another toner developing container in said flexible sheet mounting step and on the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and separated in said container separating step or the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step, and a second side seal continuously on the other longitudinal end of the flexible sheet mounted on the toner developing container having the flexible sheet and separated in said container separating step or mounted on the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step and on the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and separated in said container separating step or the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step; (h) a toner refilling step of refilling the toner into the toner accommodating portion of the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and being separated in said container separating step or a toner accommodating portion of the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step, through the toner supply opening of the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and being separated in said container separating step or through a toner supply opening of the another toner developing container having the flexible sheet mounted in said flexible sheet

mounting step; (1) a developing blade mounting step of mounting the developing blade dismounted in said developing blade dismounting step or another developing blade on the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and separated in said container separating step or the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step; a developing roller mounting step of mounting the developing roller dismounted in said developing roller dismounting step or another developing roller on the toner developing container having the flexible sheet mounted in said flexible sheet mounting step and separated in said container separating step or the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step; and (k) a container coupling step of coupling the toner developing container having the flexible sheet mounted in said flexible sheet mounting step, the developing blade mounted in said developing blade mounting step and the developing roller mounted in said developing roller mounting step and being separated in said container separating step or the another toner developing container having the flexible sheet mounted in said flexible sheet mounting step, the developing blade mounted in said developing blade mounting step and the developing roller mounted in said developing roller mounting step with the cleaning container separated in said container separating step or another cleaning container by engaging the pins disengaged in said container separating step or other pins into them. The elastic member is mounted on a side of the end seal. The end seal is made of a plastically deformable material.

Response to Arguments

Applicant's arguments with respect to claims 1-27 have been considered but are not persuasive. Applicant has amended the claims to include an elastic member; however, it is

unclear which member described in the specification is being claimed. The examiner assumes that applicant is claiming member 66. Nevertheless, the limitation cannot be address until it is identified.

The remanufacturing method of Nagashima differs from the instant invention in the step of mounting the toner seals since the toner seals of Nagashima are different from those in the claimed process cartridge described in the instant invention. However, when the remanufacturing method of Nagashima is applied to a process cartridge with the same toner seal configuration, including the newly claimed elastic member, as in the instant invention such as described in Uehara, one of ordinary skill would arrive at the claimed invention.

The claims remain rejected as discussed above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quana Grainger whose telephone number is 571-272-2135. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on 571-272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Quana Grainger
Primary Examiner
Art Unit 2852

QG